

| L Number | Hits | Search Text  | DB                                 | Time stamp       |
|----------|------|--|------------------------------------|------------------|
| 35       | 1290 | (base and drain and source and emitter and (channel with concentration))   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2005/01/04 17:53 |
| 36       | 132  | ((base and drain and source and emitter and (channel with concentration))) and (concentration with constant)   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2005/01/04 17:53 |
| 37       | 10   | (US-6060731-\$ or US-6501128-\$ or US-5536961-\$ or US-5489787-\$ or US-6303410-\$ or US-6001678-\$ or US-5895939-\$ or US-4967243-\$ or US-4441117-\$ or US-6670658-\$).did.  | USPAT                              | 2005/01/04 17:53 |
| 38       | 129  | ((((base and drain and source and emitter and (channel with concentration))) and (concentration with constant)) not ((US-6060731-\$ or US-6501128-\$ or US-5536961-\$ or US-5489787-\$ or US-6303410-\$ or US-6001678-\$ or US-5895939-\$ or US-4967243-\$ or US-4441117-\$ or US-6670658-\$).did.))   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2005/01/04 17:53 |
| 39       | 93   | (((((base and drain and source and emitter and (channel with concentration))) and (concentration with constant)) not ((US-6060731-\$ or US-6501128-\$ or US-5536961-\$ or US-5489787-\$ or US-6303410-\$ or US-6001678-\$ or US-5895939-\$ or US-4967243-\$ or US-4441117-\$ or US-6670658-\$).did.)) and (collector and gate and (insulat\$4 or dielectric)))   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2005/01/04 17:54 |
| 40       | 69   | (((((base and drain and source and emitter and (channel with concentration))) and (concentration with constant)) not ((US-6060731-\$ or US-6501128-\$ or US-5536961-\$ or US-5489787-\$ or US-6303410-\$ or US-6001678-\$ or US-5895939-\$ or US-4967243-\$ or US-4441117-\$ or US-6670658-\$).did.)) and (collector and gate and (insulat\$4 or dielectric))) and (impurity adj concentration))   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2005/01/04 17:56 |
| 41       | 68   | ((((((base and drain and source and emitter and (channel with concentration))) and (concentration with constant)) not ((US-6060731-\$ or US-6501128-\$ or US-5536961-\$ or US-5489787-\$ or US-6303410-\$ or US-6001678-\$ or US-5895939-\$ or US-4967243-\$ or US-4441117-\$ or US-6670658-\$).did.)) and (collector and gate and (insulat\$4 or dielectric))) and (impurity adj concentration)) and electrode                          | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2005/01/04 17:56 |
| 42       | 48   | (((((((base and drain and source and emitter and (channel with concentration))) and (concentration with constant)) not ((US-6060731-\$ or US-6501128-\$ or US-5536961-\$ or US-5489787-\$ or US-6303410-\$ or US-6001678-\$ or US-5895939-\$ or US-4967243-\$ or US-4441117-\$ or US-6670658-\$).did.)) and (collector and gate and (insulat\$4 or dielectric))) and (impurity adj concentration)) and electrode) and (trench or buried) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2005/01/04 17:56 |

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|--|------|---|---|---------------------|
|  | 1    | "20040089886"   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB · USPAT; | 2004/07/11<br>19:56 |
|  | 2    | "6670658"   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB · USPAT; | 2004/07/11<br>19:56 |
|  | 5    | "6495871"   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB · USPAT; | 2004/07/11<br>19:56 |
|  | 21   | Hattori-hidetaka.in.  | USPAT; US-PGPUB; EPO; JPO; IBM_TDB · USPAT; | 2004/07/11<br>19:56 |
|  | 0    | 6670658.URPN.   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB · USPAT  | 2004/07/11<br>19:56 |
|  | 9266 | ("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor) and (channel with (concentration with constant or equal)))  | USPAT; US-PGPUB; EPO; JPO; IBM_TDB · USPAT; | 2004/07/11<br>19:56 |
|  | 38   | ("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor) and (channel with (concentration with (constant or equal)))   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB · USPAT; | 2004/07/11<br>19:56 |
|  | 48   | ("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB · USPAT; | 2004/07/11<br>19:56 |
|  | 38   | ((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((5895939).PN.) (((5895939).PN.) and ((impurity adj concentration) or concentration)) ((4967243"   "5471072"   "5543637").PN.) ("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)   | USPAT; US-PGPUB; EPO; JPO; IBM_TDB · USPAT; | 2004/07/11<br>19:57 |
|  | 23   | ((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((5895939).PN.) (((5895939).PN.) and ((impurity adj concentration) or concentration)) ((4967243"   "5471072"   "5543637").PN.) ("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emitter or source)) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB · USPAT; | 2004/07/11<br>19:57 |

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|  | 15 | ((("IGBT" or (insulat\$3 adj gate adj<br>bibolar adj transistor)) and (channel<br>with (concentration with (constant or<br>equal\$5 or similar or equival\$4)))) not<br>("20040089886" "6670658" "6495871"<br>Hattori-hidetaka.in. ((5895939).PN.)<br>(((5895939).PN.) and ((impurity adj<br>concentration) or concentration))<br>(("4967243"   "5471072"   "5543637").PN.)<br>(("3391311"   "4441117"   "4521795"  <br>"4605948"   "4641174"   "4783693").PN.)<br>4967243.URPN. (Hattori-hidetaka.in. and<br>(base and drain and (source or emitter)<br>and (impurity adj concentration)))<br>6495871.URPN.)) and (gate and (collector<br>or drain) and base and (emiiter or<br>source)) and (channel with (impurity adj<br>concentration))            | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>19:57 |
|  | 1  | ("5895939").PN.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>19:57 |
|  | 1  | ((5895939).PN.) and ((impurity adj<br>concentration) or concentration)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>19:57 |
|  | 3  | ("4967243"   "5471072"   "5543637").PN.   | USPAT                                       | 2004/07/11<br>19:57 |
|  | 6  | ("3391311"   "4441117"   "4521795"  <br>"4605948"   "4641174"   "4783693").PN.  | USPAT                                       | 2004/07/11<br>19:57 |
|  | 16 | 4967243.URPN.   | USPAT                                       | 2004/07/11<br>19:57 |
|  | 6  | Hattori-hidetaka.in. and (base and drain<br>and (source or emitter) and (impurity adj<br>concentration))  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>19:57 |
|  | 1  | "20010026977"   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>19:57 |
|  | 1  | "5895939".PN.   | USPAT                                       | 2004/07/11<br>19:57 |
|  | 1  | "5895939".PN.   | USPAT                                       | 2004/07/11<br>19:57 |
|  | 1  | 6495871.URPN.   | USPAT                                       | 2004/07/11<br>19:57 |
|  | 12 | ((("IGBT" or (insulat\$3 adj gate adj<br>bibolar adj transistor)) and (channel<br>with (concentration with (constant or<br>equal\$5 or similar or equival\$4)))) not<br>("20040089886" "6670658" "6495871"<br>Hattori-hidetaka.in. ((5895939).PN.)<br>(((5895939).PN.) and ((impurity adj<br>concentration) or concentration))<br>(("4967243"   "5471072"   "5543637").PN.)<br>(("3391311"   "4441117"   "4521795"  <br>"4605948"   "4641174"   "4783693").PN.)<br>4967243.URPN. (Hattori-hidetaka.in. and<br>(base and drain and (source or emitter)<br>and (impurity adj concentration)))<br>6495871.URPN.)) and (gate and (collector<br>or drain) and base and (emiiter or<br>source)) and (channel with (impurity adj<br>concentration)) and trench | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>20:16 |
|  | 13 | ("4672407"   "4990975"   "5151762"  <br>"5173435"   "5250449"   "5378911"  <br>"5545908"   "5701023"   "5914503"  <br>"6037628"   "6169299"   "6238980"  <br>"6303410").PN.   | USPAT                                       | 2004/07/11<br>19:59 |
|  | 1  | 6501128.URPN.   | USPAT                                       | 2004/07/11<br>20:00 |

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|---|----|--|---|---------------------|
| - | 4  | ( "5173435"   "6001678"   "6380586"   "6501128" ). PN.<br>6605858.URPN.  | USPAT                                       | 2004/07/11<br>20:01 |
| - | 12 | (( "4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410" ). PN.) and concentration   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM TDB | 2004/07/11<br>20:03 |
| - | 8  | ((("4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410"). PN.) and concentration) and (channel with (concentration))  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM TDB | 2004/07/11<br>20:04 |
| - | 3  | (((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939"). PN.) (((("5895939"). PN.) and ((impurity adj concentration) or concentration))))) not (((("4967243"   "5471072"   "5543637"). PN.) (("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693"). PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source))) and (channel with (impurity adj concentration))) not ((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939"). PN.) (((("5895939"). PN.) and ((impurity adj concentration) or concentration))))) not (((("4967243"   "5471072"   "5543637"). PN.) (("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693"). PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source))) and (channel with (impurity adj concentration))) and trench) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM TDB | 2004/07/11<br>20:13 |
| - | 48 | ((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4))))  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM TDB | 2004/07/11<br>20:18 |

|   |    |  |   |                     |
|---|----|--|---|---------------------|
| - | 26 | <p>((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) (((("5895939").PN.) and ((impurity adj concentration) or concentration)) (((("4967243"   "5471072"   "5543637").PN.) (("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source)) and (channel with (impurity adj concentration)) and trench (((("4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.)) and trench</p>  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>20:17 |
| - | 15 | <p>((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) (((("5895939").PN.) and ((impurity adj concentration) or concentration)) (((("4967243"   "5471072"   "5543637").PN.) (("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source)) and (channel with (impurity adj concentration)) and trench (((("4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.))) and trench</p> | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>20:18 |

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| - |  | 7 | <p>((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) ((("5895939").PN.) and ((impurity adj concentration) or concentration)) ((("4967243"   "5471072"   "5543637").PN.) ((("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source)) and (channel with (impurity adj concentration)) and trench) ((("4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.))) and trench) and ((source or emitter) and base and (collector or drain))</p> | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>20:24 |
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|  | 8 | <p>((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) (((("5895939").PN.) and ((impurity adj concentration) or concentration)) (((4967243   "5471072"   "5543637").PN.) (((3391311   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source)) and (channel with (impurity adj concentration)) and trench (((4672407   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.))) and trench) not (((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) (((("5895939").PN.) and ((impurity adj concentration) or concentration)) (((4967243   "5471072"   "5543637").PN.) (((3391311   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source)) and (channel with (impurity adj concentration)) and trench (((4672407   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.))) and trench) and ((source or emitter) and base and (collector or drain)))</p> | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>20:24 |
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|  | 7 | <p>(((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) (((("5895939").PN.) and ((impurity adj concentration) or concentration)) (((("4967243"   "5471072"   "5543637").PN.) (((("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source))) and (channel with (impurity adj concentration))) and trench) ((("4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.))) and trench) not (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) (((("5895939").PN.) and ((impurity adj concentration) or concentration)) (((("4967243"   "5471072"   "5543637").PN.) (((("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source))) and (channel with (impurity adj concentration))) and trench) ((("4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.))) and trench) and ((source or emitter) and base and (collector or drain)))) and (impurity adj concentration)</p> | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>20:24 |
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|  | 2 | <p>(((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) (((("5895939").PN.) and ((impurity adj concentration) or concentration)) (((4967243"   "5471072"   "5543637").PN.) ((("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source)) and (channel with (impurity adj concentration)) and trench) (((4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.))) and trench) not (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) (((("5895939").PN.) and ((impurity adj concentration) or concentration)) (((4967243"   "5471072"   "5543637").PN.) ((("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source)) and (channel with (impurity adj concentration)) and trench) (((4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.))) and trench) and ((source or emitter) and base and (collector or drain))) and (impurity adj concentration) and (concentration near2 (equal\$4 or constant or substantial\$4))</p> | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>20:51 |
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|--|---|---|---|---------------------|
|  | 8 | <p>(((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) (((("5895939").PN.) and ((impurity adj concentration) or concentration)) ((("4967243"   "5471072"   "5543637").PN.) ((("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source)) and (channel with (impurity adj concentration)) and trench ((("4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.)) and trench) not (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. (((((("IGBT" or (insulat\$3 adj gate adj bibolar adj transistor)) and (channel with (concentration with (constant or equal\$5 or similar or equival\$4)))) not ("20040089886" "6670658" "6495871" Hattori-hidetaka.in. ((("5895939").PN.) (((("5895939").PN.) and ((impurity adj concentration) or concentration)) ((("4967243"   "5471072"   "5543637").PN.) ((("3391311"   "4441117"   "4521795"   "4605948"   "4641174"   "4783693").PN.) 4967243.URPN. (Hattori-hidetaka.in. and (base and drain and (source or emitter) and (impurity adj concentration))) 6495871.URPN.)) and (gate and (collector or drain) and base and (emiiter or source)) and (channel with (impurity adj concentration)) and trench ((("4672407"   "4990975"   "5151762"   "5173435"   "5250449"   "5378911"   "5545908"   "5701023"   "5914503"   "6037628"   "6169299"   "6238980"   "6303410").PN.) 6501128.URPN. ((("5173435"   "6001678"   "6380586"   "6501128").PN.)) and trench) and ((source or emitter) and base and (collector or drain)))</p> | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>IBM_TDB | 2004/07/11<br>20:51 |
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